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I.

OBSERVATIONS ON THAT PECULIAR
CHANGE OF COLOR WHICH VE-
NOUS BLOOD UNDERGOES DUR-
ING APPROACHING SYNCOPE.

By WALTER DICK.

"Gaudeo discere aliquid, ut doceam;
nec ulla re me delectabit, licet sit eximia
et salutaris, nisi possim impostare aliis."—
SENECA.

THE notable change of color of the blood flowing from the vein of a person in health and vigor, when approaching to syncope, has long been observed. While dresser in the Glasgow Royal Infirmary, I had often remarked it, but was not particularly struck with it till lately, when a man with unreduced dislocation upwards of the thigh bone, of long standing, was admitted into that Institution. A consultation was held on the case, when it was agreed that an attempt at reduction should be made. Before proceeding to the attempt, in order to induce syncope, or at least great muscular relaxation, the patient had 30 minims of the tinct. nicotin. tobac. administered to him, was put into the hot bath, and bled to the extent of between 30 and 40 oz. while in the bath. Before the termination of the bleeding, the phenomenon mentioned above was observed in its most remarkable form. The blood, which was before of a dark hue, or venous, now

assumed all the physical properties and appearance of arterial blood.

As I have said above, no attempt has been made, so far as my knowledge goes, to explain the singular transition just described. I am induced, therefore, to offer the following observations upon the subject.

Before going farther, I think it proper to state, what I believe is universally acceded to, that, for secretion and the performance of all the other animal functions, the nerves are necessary. The researches and experiments of Brodie, too, prove to my mind their instrumentality in the generation of animal heat. Now, it appears to me that the change of color, above alluded to, is effected by the action of the sensorium being impaired; in other words, by the nervous energy being diminished and annihilated almost during the prelude to syncope. In this state, preliminary to what has been emphatically and well styled the "*imago mortis*," all the functions flag, everything proclaims to us the diminution of nervous influence. In this state I conceive little or no change is effected on the blood by the nerves; little animal heat is evolved from the suspension almost of nervous secretion or energy. In short, the blood now runs through the arteries, undergoing but little change there, enters the veins, traverses

them with as little, apparently, till complete syncope supervenes to put an end to the scene. This, to my mind, satisfactorily enough accounts for the change. In this view, I think, I am borne out, by the fact that the above-mentioned change never happens, and I believe never can happen, when fainting comes on all of a sudden, without any previous depression of the vital and animal powers.

This then is the theory I am inclined to adopt on the subject. I am not so sanguine, however, as to hope that it may not share the fate of some others, "which have had their partisans for the day, and have passed in succession through the ordeal of experience into oblivion." Should it have a better fate, I shall experience the satisfaction described by the poet :

"Felix qui potuit rerum cognoscere causas."

Before concluding, I would humbly beg to state, that the fact ought (waving all theory) to be more widely promulgated. Were it more generally known, it would undoubtedly tend to dispel those false alarms so apt to arise in the unknowing mind on first beholding it. I hesitate but little in saying, that this phenomenon has been attributed, in more cases than one, to the opening of the subjacent artery ; and I am inclined to believe, that, in not a few, has the healing up of a punctured vein, or a wound in venesection, been triumphantly cited in the pages of journals and of lectures as a favorable, successful, and speedy cure, by compression of an artery supposed to be wounded, merely because the change above alluded to supervened. This I believe to have been the case in an instance of the kind which has ap-

peared very lately in one of the London periodicals.

Glasgow Med. Journ.

II.

REMARKS ON A CONTRIVANCE FOR DRAINING THE THORAX OF LIQUIDS, EXCLUDING AT THE SAME TIME THE ADMISSION OF AIR.

By SAMUEL A. CARTWRIGHT, M.D., of Natchez.

THE fact that liquids can be conducted out of the thorax by a contrivance impervious to air, is new in surgery, and may be found important in the treatment of many cases of wounds of the lungs, empyema and dropsy.

By a letter now before me, from Dr. J. M. B. Thompson, of Louisiana, I am informed, that in three cases of hydrothorax he conducted the water out of the cavity of the chest, prevented at the same time the ingress of air, and cured his patients speedily and effectually.

A flexible metallic rod, or piece of wire, about the thickness of a common probe, and eight or ten inches in length, should be bent in the middle, so as to form a duplication, as here represented.



The double part of the wire, *a b*, is introduced through a small incision made into the chest. The parts of the wire *c d*, lie close on the integuments of the thorax. Adhesive strips are applied over the wound and wire, to prevent the admission of air. A small part of the extremities of the wire, *e f*, should be left uncovered by the

strips. The duplicature of the wire, *a b*, should be of no greater length than barely to reach the cavity of the thorax, without penetrating within that cavity. Any liquid which may become extravasated within the cavity of that side of the chest to which this instrument is applied, will pass along the wire *a b c*, and *a b d*, and make its exit drop by drop at the extremities of the wire, *e f*.

The atmospheric air will be entirely prevented from entering the cavity of the thorax by the adhesive strips. Nor will the strips covering the wire prevent the effused fluid from passing along the surface of the wire under the adhesive plaster, and dropping out at its extremities. I state this fact on the authority of Dr. Thompson. The lung, on the side to which the instrument is applied, being unoppressed by water within, or atmospheric pressure from without, continues to contract and expand; during the period a constant aqueous discharge is kept up from the cavity of the thorax. For the wire conducting off the hydropic fluid as fast as it is effused within the bag of the pleura, the oppression to respiration, from the accumulation of water, is thereby prevented. The resilience of the lung being thus preserved, greatly facilitates the cure, by placing the system in a favorable condition to be benefited by medicines.

In the event of both bags of the pleura containing water, pus, or blood, I see no reason why the operation of paracentesis thoracis should not be performed on one side, the fluid evacuated, and (if there be a probability of its reaccumulation) the instrument under consideration applied, and the wound made air-tight by the adhesive plaster; and a similar operation

could forthwith be resorted to on the other side. Thus, as fast as the fluid might be poured out within the thoracic cavities, the wires would conduct it out—the free play of the lungs being thereby preserved, the arterialization of the blood would continue to take place, and to render the system more capable of enduring the original affection, on which the preternatural effusion might depend. In cases applicable to the contrivance here suggested to the profession for consideration, it has been the practice to resort to repeated operations, to leave a *canula* in the wound, or to abandon them as incurable. Repeated tappings afford only temporary benefit, while the tendency to reaccumulation continues; and the *canula*, by admitting the external air within the cavity of the thorax, collapses the lung, and suspends its important function.

Am. Journ. Med. Sc.

III.

CASE OF PERTUSSIS IMMEDIATELY
ARRESTED BY THE USE OF
BELLADONNA AND HYDROCYANIC
ACID, AS USED BY DR.
KAHLEISS.

By WILLIAM W. VALK, M.D., of
Providence, R. I.

IN the eleventh number of this Journal, p. 238, we are informed that a combination of "belladonna, ipecacuanha, and sulphur, had been employed by Dr. Kahleiss, with the greatest success, in *one hundred cases of pertussis.*"

To satisfy myself with regard to this statement, and to test the virtue of these remedial agents, I resolved to give them a trial in the *first case* that offered. I was left in the

dark, however, as to the *proper time* of commencing the treatment, and in this respect had to depend upon my own judgment. It affords me pleasure, however, to state, that in the only trial I have made of the treatment recommended by Dr. K., it has proved speedily successful.

About three weeks ago, my infant son (near seven months old) became troubled with a cough, which appeared to be the effect of having taken cold; I remarked, however, that he *only coughed while asleep*, not being at all affected when awake. This state lasted for near twelve days, unaccompanied with the *least* obstruction in respiration, or having any symptom of tracheal or bronchial secretion. At this time the cough became more troublesome, was attended with copious mucous secretion, occurred at regular intervals of time, and had the *peculiar sonorous sound in inspiration*, which has given to the disease its characteristic name. I treated it at first as a common catarrh, and after the accession of symptoms denoting the change already mentioned, an occasional emetic was given to throw off the accumulation of mucus in the air-passages, which was invariably swallowed during the fits of coughing. No other plan was pursued for several days, and the fits of coughing becoming more distressing, but yet unattended with "pulmonary congestion," I resolved to try the "belladonna, &c.," and accordingly prepared the following formula:—1. R. Pulv. rad. belladon. gr. 1 1-4; pulv. Doveri, gr. 2 1-2; sulph. præcip. ʒj.; sacch. alb. ʒij. M. div. in chart. 20.—One powder every three hours, and between each dose twelve drops of the following:—

2. R. Aqua chamomile, 3ss.; syrupi simplex, ʒij.; acid pruss. 6 drops. M.—These prescriptions are less in proportion than those of Dr. K., as his are for a child two years old, and nearly *four times* the above quantity for the first formulæ, and *twice* as much for the second. For *three* days, these medicines were given with *care* and *regularity*, when the relief afforded being sufficiently evident, they were omitted (on the 11th Nov.), and from that time to the present (18th), the child has continued perfectly well.

The effects of these remedies were speedily manifested (in thirty-six hours), and I have every reason to believe that they will prove of singular efficacy in *cutting short* the progress of this distressing disease. "If the opinion prevail, that whooping cough *will* have a definite duration, all exertions to abridge its career will be paralyzed, and the poor suffering infants and children will be deprived of even the *moderate* aid it is now in our power to give." "As regards ourselves, we are decidedly of opinion, that its duration may as certainly be *shortened* as the march of fever." Such is the opinion of Dr. Dewees, and I am fully satisfied of its correctness, being convinced that in the instance now given, I put a *complete stop to the progress of the disease*, and that too in a very short space of time. The absence of fever and inflammatory symptoms not being sufficiently obvious, prevented my using any other remedial means than those mentioned. In conclusion, I may be permitted to recommend a trial of Dr. Kahleiss's treatment, for I believe it will be found eminently serviceable; and although I have but this *one* case to offer, it is at

least of so much interest to the profession, as to warrant an adoption of the practice. The "efflorescence and dilatation of the pupil," mentioned by the doctor as happening in some cases after the employment of these remedies, were not observed ;—in the event of its happening, however, a suspension of the treatment for a few days, and a diminution of the proportion of belladonna, will be necessary.

P. S.—I am at a loss to account for my son's having the whooping cough at this time, as he was not exposed to *contagion*, nor am I aware that the disease exists in this town. For some valuable remarks on this subject, I would refer to Dewees's Practice, Vol. I., pages 375-6-7.—*lb.*

IV.

ON THE MOST EFFICACIOUS MODE OF APPLYING SINAPISMS.*

THE following observations by MM. Trousseau and Blanc, will be found useful in settling the proper method of using mustard for sinapisms. They were induced to make some careful experiments on the subject, in consequence of the discrepant statements made in works on materia medica. Some recommend that the flour of recently-ground mustard should alone be used, others that the bran only of the flour should be taken. Some direct the flour to be made into pulp with warm water, others with vinegar, others with concentrated acetic acid, others with warm water or warm vinegar, indifferently. Some advise that the sinapism be left applied for four hours, others

for two or three hours, and others again, for a single hour only. The authors have very carefully determined the respective advantages of these several practices ; and it appears from their experiments, that the several circumstances of difference are very far from being immaterial.

Their experiments were made chiefly with the black mustard commonly used for culinary purposes in Paris. They first found that the flour loses scarcely any of its activity by keeping. In their standard experiment, they remarked, that recently-ground mustard, mixed up to a proper consistence with cold water, caused slight smarting in five minutes, and in ten minutes the heat and sense of burning which characterizes the full operation of the sinapism. They next remarked that flour five months old did not cause smarting within seven minutes, but brought on the full sense of burning in ten minutes, or as soon as the sample of fresh flour. They then found, that when the sample of fresh flour was mixed up with hot, instead of cold water, the smarting commenced in three minutes ; but the full sense of burning was not developed in less than ten minutes ; and, consequently, although hot water accelerates the commencement of its action, the effect is ultimately and in a very short time the same when cold water is used. The most remarkable results, however, were obtained from their experiments with acetic acid. When the sinapism was made with common vinegar, instead of water, its activity was not increased, as is commonly supposed to be the case ; it was, on the contrary, much retarded and diminished. In fifteen minutes there was extremely slight smart-

* Edinb. Med. and Surg. Journal, from the Arch. Gén.

ing, which increased so slowly, that in fifty minutes it was not greater than was produced by the water sinapism in six minutes. The substitution of warm for cold vinegar did not increase its activity. Neither was any advantage gained by substituting for common vinegar concentrated acetic acid, diluted with its volume of water; on the contrary, no effect whatever was then manifested in forty-five minutes. Nay, concentrated acetic acid itself appears not more powerful than simple water. A sinapism made with it had no effect in six minutes; in seven minutes there was slight smarting; and the full sense of burning was not developed till the twelfth minute. These are interesting facts, because they show that the mustard-flour and the acetic acid possess the property of mutually moderating the rubefacient or irritating properties of one another. Concentrated acetic acid itself seems, from the experiments of the authors, to be one of the most rapid, powerful, and convenient rubefacients, that can be employed. When applied on a sponge, or mixed with saw-dust, so as to form a mass like that of a sinapism, acute smarting pain was produced in a minute and a half: in a minute more the pain was insupportable: in three minutes from its first application, the experimentalist was compelled to remove it; and notwithstanding the short interval which was thus allowed to pass before its removal, the corrosion produced left a mark three months afterwards. A singular fact, which they have not been able to explain, is, that the activity of a sinapism made with English mustard, is not lessened, like that of the French mustard, by substituting vinegar for water.

The following is their account

of the several consecutive effects of a sinapism made with water, and of the precautions which should be observed in using it:—The first effect is prickling or smarting, which begins in five minutes: in ten minutes, this is converted into acute burning pain, such as is produced by hot iron held near the skin; next, a deeper-seated sensation is felt, like that of constriction, or of a heavy weight pressing on the muscles; but after twenty or twenty-five minutes more, the original burning pain returns more violently than ever, and few, who are not insensible from some affection of the brain, can support the sinapism much longer. After its removal, the impression of the cold air relieves the burning for a time; but this, in a few minutes, returns acutely, is soon attended with an uniform, rosy efflorescence, and may continue more or less severely for twelve hours, or several days. The authors maintain, that if a sinapism is properly made, and of good materials, it should very rarely remain applied longer than between forty-five minutes and one hour; and that, if it is left for three or four hours, as some direct, its effects may sometimes prove extremely unpleasant. In cases of cerebral oppression during fever, they have known severe sloughing induced by the neglect of this precaution, the physician having been misled by the patient not complaining of pain, and having allowed the sinapism to remain for several hours.

V.

ON A MODE OF EXTRACTING PESSARIES.

By SAMUEL MERRIMAN.

OF the various means employed to support and preserve in its place

the prolapsed uterus, few have been found so advantageous and effectual as the hollow globular pessaries, formed of box-wood; but a great inconvenience is sometimes experienced when these pessaries come to be withdrawn, after having been permitted to remain too long in the vagina. Levers, forceps, perforating scissors, and other instruments, have been recommended and employed; but none of these instruments can be very conveniently made use of, and the operation of extracting this kind of pessary is often attended with much pain and suffering to the patient.

Some time ago I was called upon to remove a globular pessary, which had been retained ten years, and I was for a long time foiled in my endeavors to extract it. I tried various instruments, but could succeed with none of them. A pair of small forceps appeared most likely to effect the extraction, but I could not keep the ball sufficiently firm to bring it through the os externum, so that I was obliged to leave my patient, in order to procure another instrument, with which I did not doubt of success.

This instrument was that part of Signor Assilini's perforating machinery which consists of a long, round, wooden handle, into one end of which is inserted a pyramidal screw, the base being about half an inch in diameter, and the screw rising to a point nearly half an inch from the base. The point of the screw being brought in contact with the pessary, and the pessary kept steady with two fingers of the right hand, the handle is to be turned round repeatedly. The point of the screw easily enters the pessary, and as the screw, acting as a wedge, advances, the pessary splits into pieces, which are easily

extracted by the finger, and the degree of suffering to the woman is really not worthy of mention.

In August last, at the request of a friend, who had been foiled in his endeavors to extract a pessary, I used the same means, and succeeded most happily; and I have again succeeded in another case, so that I have no hesitation in recommending Assilini's screw as the most effectual method of dislodging the globular pessary in all similar cases.

The instrument which I employed was furnished to me by Messrs. Stodart, of the Strand, the original makers of Assilini's instruments.

Lond. Med. Gaz.

VI.

ST. JOHN LONG'S LINIMENT.*

Two correspondents of the Medical Gazette, "who have been endeavoring conjointly to find out the panacea" of the renowned lung doctor of Harley Street, state that the following liniment produces precisely the same effects as that of Mr. Long.

R. Acid. nitr. muriat. 3 ij.
Ol. terebinth. 3 i.
— Camphoræ 3 v.

Misce ft. linimentum;—or, which is better:—

R. Acid. nitr. muriat. 3 ij.
Ol. terebinth. 3 ij.
Axungię 3 v.

Melt the lard, and then add the other ingredients, stirring the whole till quite cold.

"Either of these liniments rubbed upon the skin with a sponge, will, in three or four minutes, cause

* From the Medico-Chirurg. Review.

it to be highly reddened, and the capillary vessels to be injected with blood. If the rubbing be continued, small pustules, here and there, containing a transparent limpid fluid, will make their appearance ; and if it be still persisted in, the part becomes excoriated, and an exudation of a thin clear lymph is the result. During its operation, the patients first feel warmth in the part where it is applied, then smarting, and at length actual pain. With regard to the humor Mr. L. pretends to extract, this appears to be nothing but the residue of the liniment left upon the skin ; and as to its affecting the part only where the disease is situated, it certainly is true that it does not seem to act upon the whole of the surface of the skin on the chest alike ; but this arises from some parts being more tender than others : hence the skin on the superior parts of the chest requires less rubbing with the liniment than that covering the ribs."

Without attaching the least credit to the supposition that this is the liniment employed by LONG, we may ask, is the application of such a preparation as that above described, upon the skin, of any service in phthisis, or not? We have tried it in several cases, and, in all, the patients have expressed relief after its employment. They have had less cough, they have breathed more freely, and the expectoration has been diminished in quantity. We have only employed this remedy six weeks, and hardly that ; so that what permanent good may result from it we know not. We cannot, however, but acknowledge that we think it might be a useful addition to the means we already possess, to produce *immediate* counterirritation. We are fully

aware that a blister is attended by a like result ; but, at the same time, its action is slow, and its after-effect is such that it is some time before it can be repeated, and it cannot be applied over any extent of surface. The antimonial ointment, likewise, is another counterirritant ; but this also is uncertain in its action, and slow in its operation, and it cannot well be used again until the pustules arising from it have healed. The nitro-muriatic acid liniment, however, produces the effect almost instantaneously, and can be employed on any extent of surface without those inconveniences ; for although it gives rise, at the same time, to a profuse determination of blood to the skin, yet this gradually subsides, and it can be reapplied (if it has not been improperly used) as often as we may consider it necessary.

P. S.—In the first of the forms published in our contemporary, a mechanical separation of the ingredients takes place on standing. The second formula is better adapted for use ; but, unless a greater proportion than one half of the muriatic acid be used, the effect on the skin is inconsiderable. We have used the liniment on several occasions. It is a counterirritant of easy application, and not very painful in its effects. We do not believe that it is at all similar to that which St. John Long employs. It may be found a useful remedy.

VII.

OBSERVATIONS ON SOME CASES OF
SUPPOSED RHEUMATIC AFFEC-
TION OF THE LOWER EXTRE-
MITIES IN FEMALES. BY MA-
DAME BOIVIN.

It will be some time before we see such minute pathological investiga-

tions from the pen of a female writer in this country, as Madame B. occasionally sends forth into the medical world! But we shall let the lady speak for herself.

Case 1.—A female, 55 years of age, the mother of seven children, had always enjoyed good health till the age of 52, when she was seized with pains in the iliac regions, and in the lower extremities. The catamenia had been suppressed some time previously. Leeches, frictions, anodynes, warm baths, and various other means were used, without any relief. The menses returned; but the pains persisted. They were considered rheumatic. A discharge of blood now took place from the uterus, and continued, more or less, for many months, without exciting any suspicions in the mind of the medical attendant, till Madame Boivin and M. Dubois were consulted, when they discovered an enormous cancer of the uterus, together with an ovarian disease causing adhesions about the pelvis, which no doubt gave origin to the pains considered rheumatic. She was sent from the *Maison de Santé* into the country to die.

Case 2.—This case shows the danger of a too speedy return to occupations after an accouchement.

A female did not menstruate till the age of twenty; but, after that period, had the catamenia regularly continued till her 29th year, when she became pregnant, and went into the hospice of the *Ecole de Médecine* for accouchement. Her delivery was rapid, the labor only continuing one hour. On the *third* day, the female returned to her master's house, and took to her usual avocations of cooking! But

she was soon seized with violent fever, swellings of the mammæ, pains in the abdomen, in the left iliac region, to which leeches and fomentations were applied. She was sent into the hospital Necker, where she was properly treated, and comparatively cured; but still there remained a tumor in the left iliac region, with pains in the hip and thigh, which were considered rheumatic by her subsequent medical attendants. She ultimately came under Madame Boivin's observation in a *Maison de Santé*, and on accurate examination, the os uteri was found to be thrown out of its proper situation; to be hard and enlarged; while a tumor was felt occupying the iliac region, which was considered as a diseased ovary. By proper treatment the symptoms were much mitigated; but she was discharged uncured.

Several other cases are related by Madame Boivin, to show how frequently medical men confound the pains resulting from organic disease in the pelvis, with rheumatic pains in the lower extremities. These we need not detail. The above are sufficient to put practitioners on their guard.—*Ib.*

MEDICAL JOURNAL.

BOSTON, MARCH 22, 1831.

HAWTHORNE ON VENTILATION.

A NEW mode of ventilating hospitals, &c., has recently been proposed by George Hawthorne, M.D. Dr. H. has certainly avoided one evil in his treatise, the evil of a great book. His remarks on ventilation are comprised in 84 loosely-printed 24mo pages. This circumstance, and the interest of the subject, have induced us to

depart from our usual custom, and to offer a brief analysis of its contents.

The volume commences with a consideration of the evils arising from exposure to an impure atmosphere, whether rendered so by respiration simply, by the effluvia from decomposition, or by both these causes united, as happens in the crowded wards of hospitals where the air is not frequently renewed. Dr. H. justly considers it of primary importance to the welfare of the system, that the air which is acted on by respiration, and by the secretions from the surface, should be constantly carried away, and pure air substituted therefor. Under most circumstances, this is attended with no difficulty, and takes place, in fact, by the necessary operation of physical laws. In other situations, the difficulty of effecting it is greater, and some artificial arrangements become necessary for this purpose. Among these may be mentioned the wards of hospitals, the holds of vessels, and mines.

Air, like any other fluid, remains at rest, unless operated on by some moving cause. Of these moving causes, there are many which exercise occasional influence, and exert a limited action. But the great cause which we see at work in nature to produce motion in air, is heat. Wherever this principle is applied, the air becomes rarified, and specifically lighter, and therefore ascends. Its place is immediately supplied by the expansion of colder air, which in its turn leaves a space to be filled by other air, furnished from a region of lower temperature. On this prin-

ciple may be explained all currents of air, from the strongest wind to that which draws through the chimney of an Argand lamp. Wherever this agent can be employed, a current may be created and permanently maintained. Of course, by a person remaining in the open air, no inconvenience is experienced in regard to ventilation. The breeze which passes him carries away the air expired from his lungs, and furnishes a supply of salubrious air. In the apartments of the healthy, the same effect takes place by means as simple. In summer, the air is freely admitted, and the motion of that without is communicated to the portion within. In winter, the heated air of the fireplace escapes through the chimney, and innumerable currents from the various openings into the external air are simultaneously tending to this point. Independently of artificial heat, the air of an apartment, in winter, differs enough from that without to secure a free circulation; so that the small amount of tainted air formed by the healthy system under ordinary circumstances, is far more than counterbalanced by the coexistent means of ventilation.

In the peculiar situations above referred to, this proportion is too often reversed. The wards of a hospital are more crowded than are other sitting or sleeping apartments. The exhalations from the bodies of patients, and the secretions from the lungs, form two additional means by which the medium which surrounds them must be impaired in its character. While in this way the air is more rapidly vitiated, its renewal is

attended with some circumstances of difficulty. In summer, indeed, patients may, and most generally do, receive the benefit of the external air, from the doors and windows of their apartments. But this mode of furnishing air has its defects and disadvantages. Those who are nearest to the window receive the force of the current, and feel it more sensibly than is agreeable or useful. The amount admitted, also, varies with the direction and force of the wind ; and it is not easy to enforce regulations by which this irregularity shall, even as far as is possible, be met by corresponding precautions. Lastly, the means for the escape of foul air, under these circumstances, are inadequate. In winter, this difficulty is obviated to a considerable extent, provided an open fireplace exist in the ward, which is not always the case. The evil, however, in winter, arises from the necessity of sustaining the apartment at a uniform temperature, and of doing this at a small expense. Of course, the galleries, as well as the wards, are heated, and no cold air is suffered to gain admission, except through the crevices in the windows, which are usually insufficient to supply it. If the apartments are heated by flues, the difficulty is the reverse of that stated. Fresh air, or at least new air, is introduced in a heated state, and traverses the space in the ward ; but no provision is made by which it displaces, except very slowly, the foul air generated within. The best system, then, would seem to be that which, in winter, should combine the furnace with the fireplace, and

which, for summer, should substitute for the usual mode of introducing fresh air, one more uniform in its operation, and some contrivance for its rapid escape when rendered unfit for use. Dr. Hawthorne proposes to effect these objects by the plan which he recommends.

According to this plan, every hospital should be provided with two air-pipes, of a size suitable to its dimensions, one to introduce fresh air, and the other to convey away what has been rendered unhealthy. The first he proposes to have open, by two or three branches, into each room, within three feet of the floor, and the other by an equal number on the opposite side ; so that the air passing from one to the other, may traverse the whole length of the apartment. The former he calls the warming, and the latter the ventilating tube, though the first would, according to circumstances, produce opposite changes of temperature. The warming tube is connected with the external air by two branches, one to be used in winter, the other in summer. The former passes through a fireplace on the ground floor, by which the air is heated to any temperature required ; the latter pursues a more direct course. Each of these being provided with a stop-cock, either can be opened, and the other closed, as occasion requires. The openings of this funnel into the external air, take place at the bottom of the building, and the tube ascends through its whole course. The ventilating tube referred to should form another perpendicular funnel, which, after passing to the

bottom of the building, becomes horizontal for a few feet, and then, ascending, passes through another fireplace kept constantly heated, and empties itself into the external air. On the side of each apartment in which the warming tubes enter, a screen about three feet high should be carried across, in such a manner as to intercept the current, and cause a more equable diffusion of the air introduced. The beds should also be arranged near the middle of the apartment, so that the greatest possible benefit may be derived by the patient from the ventilation employed, and that the medical or other attendant, by placing himself on the windward side of a bed, may be, as respects the particular patient who occupies it, secure from contagion.—Such are the outlines of Dr. H.'s plan. Some other details, which appear to be of minor importance, we purposely omit.

Dr. H. thinks that the principle of aiding the escape of foul air from apartments by heat, even in summer, might be advantageously adopted in the private apartments of the sick. For this purpose, he recommends that the fireplace of such apartments be provided with a screen, enclosing it completely, except below, where an opening may be left for the passage of the air. In a fireplace so guarded, he thinks a fire might be made at any season, without inconvenience to the inmate of the room. We regard this hint as a useful one, as there are many diseases in which the advantage of free ventilation would much more than counterbalance the evil of a fire at any season, pro-

vided it were screened in the manner referred to.

As respects the plan of obtaining hot air from a furnace in the manner above proposed, there is this general objection—that air thus heated is deprived of its moisture, and enters the apartment in a state too dry for convenient respiration. We have always been of opinion that an apartment warmed by heated air alone, was neither agreeable nor healthy. An additional fire within the room, and the evaporation of a sufficient quantity of water, will remedy this evil. Heating with steam may perhaps answer better.

Dr. H. next considers the means of applying the same principle to the ventilation of vessels and of mines. As we doubt greatly the practicability of the plans which he suggests for this purpose, we shall not particularly describe them. In that which he recommends for mines, the ventilator must extend from the bottom of the mine to the ground, and contain a grate for the fire, which is secured by network, like a safety lamp; a construction too complicated for convenient use, and at best attended with some hazard. We must therefore limit our comments to that part of Dr. H.'s scheme which can be put in execution on shore and above ground. Of the benefits to be derived from free ventilation in places where numbers of patients are collected together, we are fully persuaded; and we consider the plan here proposed of accomplishing so desirable an object, to be every way worthy of a fair trial.

MEDICAL REFORM.

A REFORMED Medical College has lately been instituted at Worthington, Ohio. The Inaugural Address of the President, Dr. John J. Steele, is, without exception, the most weak, absurd and contemptible affair of the kind we ever met with in print. He avows that the chief object of the reform contemplated by this College, is to "dismiss from the materia medica, the internal use of mercury, antimony, lead, iron, copper, zinc, arsenic, and other poisonous minerals, and to supply their place with vegetable medicines." Because the vegetable productions of the earth are "so bountifully scattered by our beneficent CREATOR," the Dr. appears to infer that these productions, and these only, were designed for the cure of the numerous ills that flesh is heir to. He appears to forget that *minerals*, as well as vegetables, are scattered around us in profusion, and that these too are the gift of a beneficent Creator.

It is asserted, in this Address, that the most eminent of the older physicians acknowledge that fever, a buffy crust on the blood, congestion and obstruction, are produced by the internal use of the "metallic minerals." Now this is very true; but how excessive the delusion which could not discern that this effect is not peculiar to the "metallic minerals;"—the same is true of opium, and a hundred other vegetable productions. It would be an inexcusable waste of time to give any account of this production,—suffice it to say that it is eminently worthy

the nature of the institution, over which its *erudite* author is called to preside.

LIBRARY OF PRACTICAL MEDICINE.

THE Counsellors of the Massachusetts Medical Society have commenced the publication of a series of volumes, with the above title, which are to be distributed to the members of the Society, without any extra expense to them. It is thought the annual income of the Society will defray the expenses of this publication, and the members will thus be furnished with a body of practical works, by the most approved authors, on the several branches of Medical Science. This plan is in conformity with the views expressed by a writer in this Journal, whose articles entitled "Medical Literature" have recently appeared in our columns.—The publications contemplated by the Counsellors are to be under the direction of the publishing committee, which is composed of gentlemen whose talents and standing are a sufficient pledge that the plan will be well executed, and meet the entire approbation of the Society.

That excellent work on Fever, by Dr. Southwood Smith, which was noticed in our last volume, page 725, and Dr. Tweedie's Clinical Illustrations of the same subject, are now preparing, in pursuance of the above scheme, and will be ready for delivery, *according to the vote of the Counsellors*, at the next meeting of the Society.

Murray on Pulmonary Consumption.—As we alluded, some time ago, to the treatise of Mr. M. on this subject, we offer the following notice of his remedy from the London Med. and Phys. Journal. The work itself is not yet, we believe, arrived in this country.

The use of chlorine fumigations in pulmonary consumption has excited the attention of many physicians on the continent, and various opinions have been entertained of its merit. If the facts in its favor are fairly stated, which we have no right to doubt, it appears that it never does harm, if it be properly employed, and that it not unfrequently alleviates some of the most distressing symptoms. We are too much in want of additional means in the treatment of pulmonary consumption, to treat any remedy that is proposed with carelessness or contempt. The chlorine fumigations, therefore, should have a dispassionate trial, and every experiment that is made should be communicated to the profession; for, until more satisfactory information is communicated upon the subject, positive conclusions would be premature. Sir Charles Scudamore is now trying the effects of chlorine and iodine in consumptive cases, and has announced a work upon the subject.

Mr. Murray's work "would have appeared some years ago, but it has been postponed from time to time, in the hope of finding some substitute for chlorine, that might be equally effective, and not so irritating to the lungs;" and we are informed that "in the vapor of nitric acid, or red fuming nitrous acid, he has discovered what he was in quest of." "This vapor, equally effective with chlorine, possesses a very superior advantage over it, in that it can (as we have in numerous cases of diseased lungs proved) be breathed, mixed with atmospheric air, without the slightest irritation being produced on the pulmonary apparatus." In

the administration both of chlorine and nitrous acid gas, much caution is required. Metallic and gilded articles of furniture, and colored hangings, must be removed. A room, indeed, should be emptied of its furniture, and devoted exclusively to the purpose. Mr. Murray employs these remedies in the following manner:—"If a portion of peroxyde (or black oxyde) of manganese be put into a small basin or teacup, and muriatic acid (or spirit of salt) poured over it, and the ingredients, mixed together, be suffered to float in a vessel of tepid water, chlorine gas will be disengaged, and impregnate the atmosphere: the proportions of the peroxyde and muriatic acid must be according to the size of the apartment, and the strength of the patient to bear it;—thus it may be from a quarter to an ounce of the former, and two or more fluid ounces of the latter. The patient must enter this atmosphere several times a day, and each time remain a short period, so long as not to be painful or oppressive, and the quantity of impregnation must be insufficient to excite cough or irritate the lungs: two or three minims at a time, and repeated five or six times a day, will be found quite sufficient. The physical strength and progress of the disease, in fact, circumstances and feelings, must determine these points." "We have been accustomed to administer nitrous acid gas in pulmonary consumption in the following simple manner: a small quantity, to the amount of one or two ounces, of red fuming nitrous acid, is poured into a wide tumbler glass, and the patient sitting in the current of the vapor, in the act of escape and diffusion into the atmosphere, at about eighteen inches, more or less, apart from the glass, according to circumstances, the vapor will soon be felt, and at no distant interval an evident amendment will attest its efficacy, and proclaim its value. The patient may remain two or three

minutes at once, and repeat the experiment four or five times a day, as may be convenient and agreeable. At the close, a bladder may be put over the glass, which will retain the vapor and preserve it for further use, since the same supply may be used several times."

Gonorrhœa treated with Chlorate of Lime.—Dr. Edward Graefe has pursued this practice in five cases with success. He saw the patients shortly after they were infected. The following was the form of the medicine employed:—Chlorate of lime, 3i., Almond emulsion, 3vij., Syrup, 3i.; a tablespoonful every three hours. Some irritation of the urethra, and a continual desire to make water, were at first produced. These symptoms soon subsided, and the disease was speedily cured.—*Journ. fur Chir.*

Abolition of Latin Examinations.—The custom of examining, in the Latin language, candidates for medical degrees and licenses, has been abolished, by a late regulation of the faculty in Dublin. This important step—out of the trammels of old and absurd prescription—has been taken, not only by the College of Physicians, but by the University in that city: in the latter, we understand, chiefly through the instrumentality of Dr. Macartney and the new Regius Professor of Physic, Dr. Whitely Stokes.

Healthiness of Boston.—It is a fact of some interest, and not a little remarkable, that with the exception of Boston, the health of the more southern cities is greater, the lower their latitude. On an examination

of the bills of mortality for the year 1830, it will be found that, of the cities mentioned, in proportion to their population, the greatest measure of health, or rather the least number of deaths, has been in Boston. Next on the scale comes Charleston, S. C.; then Baltimore, Philadelphia, and New York.

Dr. Drake.—It is not without some surprise we learn that Dr. Drake has withdrawn from the Faculty of the Jefferson Medical College at Philadelphia. Dr. Eberle has also left that Institution. The former has accepted the appointment of Professor of Theory and Practice of Physic at Miami University, Ohio; and the latter, the chair of Materia Medica, in the same School.

Officers of the Massachusetts College of Pharmacy.—At a meeting of the College, March 16th, 1831, the following gentlemen were chosen officers for the ensuing year:—Daniel Noyes, *President*; Charles White, *Vice President*; Samuel N. Brewer, *Treasurer*; Charles French, *Secretary*; Joseph Kidder, Daniel Hinchman, Ebenezer Wight, Terence Wakefield, *Trustees*.

Smallpox.—Since our last notice, five cases of Smallpox have been sent from this city to Rainsford Island.

NOTICE.

WE have to acknowledge but one communication this week. With the author of this we should be pleased to have an interview. We are entirely agreed respecting the object to be attained, but differ, probably, in opinion respecting the best means of accomplishing it.

Whole number of deaths in Boston the week ending March 12th, 30. Males, 17—Females, 13. Of consumption, 5; dropsy on brain, 2; dropsy, 1; croup, 1; canker, 1; drowned, 2; unknown, 2; mortification in bowels, 1; old age, 4; intemperance 1; abscess, 1; accidental, 1; quinsey, 1; tumor, 1; brain fever, 1; lung fever, 1; infantile, 1.

ADVERTISEMENT.

THE NATURALIST. Devoted to Zoology, Botany and Mineralogy, illustrated by Lithographic Prints, edited by D. JAY BROWNE, aided by distinguished Naturalists, and published monthly by Peirce and Parker, No. 9 Cornhill, Boston. Each number contains 32 octavo pages. Price, Two Dollars a year in advance.

March 22.

BOYLSTON MEDICAL PRIZE QUESTIONS. The Boylston Medical Committee of Harvard University hereby give notice, that in consequence of the death of their late Chairman, Thomas Welsh, M. D. the Dissertations for the present year must be forwarded, post paid, to John C. Warren, M. D. Boston, on or before the first Wednesday of April next.

GEORGE HAYWARD, Secretary.

Boston, March 3d, 1831.

March 8. 2w.

NOTICE. Those gentlemen who are yet indebted for the 1st vol. of the Med. and Surg. Journal, from Feb., 1828, to Feb., 1829, are hereby notified, that, after four weeks, the Proprietors of that Volume have authorized Mr. S. Smith to collect all that is due to them for it; and the present Proprietor respectfully requests that those indebted to him for the Medical Intelligencer, and the 2d and 3d vols. of the Med. and Surg. Journal, will forward all arrears.

JOHN COTTON.

The subscribers above mentioned for said 1st vol., are hereby requested to remit payment for the same to the subscriber, at the office of the Boston Daily Advertiser.

SAMUEL SMITH, Agent for said Proprietors.

March 1, 1831.

COPARTNERSHIP NOTICE. The subscribers have formed a connexion in business as CHEMISTS, DRUGGISTS & APOTHECARIES, at Apothecaries' Hall, No 188 Washington Street, opposite Marlboro' Hotel, under the firm of JARVIS & PEIRSON.

NATHAN JARVIS.

GEORGE W. PEIRSON.

EUROPEAN LEECHES.

J. & P. have a few fine European Leeches—to the application of which, when directed by Physicians, they will attend without any additional charge.

Feb. 8.

WILLIAMS ON DISEASES OF THE CHEST. This day received, by CARTER & HENDEE, "A Rational Exposition of the Physical Signs of the Diseases of the Lungs and Pleura, illustrating their Pathology and facilitating their Diagnosis." By CHARLES J. B. WILLIAMS.

Dec. 6.

BECLARD'S GENERAL ANATOMY. CARTER, HE DEE & BABCOCK have this day received—Elements of General Anatomy, or a Description of every kind of Organ composing the Human Body. By P. A. BECLARD, Professor of Anatomy of the Faculty of Medicine of Paris. Preceded by a critical and biographical Memoir of the Life and Writings of the Author. By OLIVIER, M.D. Translated from the French, with Notes. By JOSEPH TUGNO, M.D., Member of the Philadelphia Medical Society.

Dec. 28.

SURGICAL INSTRUMENTS AND CHEMICALS. Students in want of the above articles, would do well to call, before purchasing, at BRE ER & BROTHERS', Nos. 90 and 92 Washington Street—Boston.

Oct. 15. ep8m

SURGEON DENTIST'S MANUAL. Just received, by CARTER & HENDEE, The Surgeon Dentist's Anatomical and Physiological Manual. By G. WAITE, Member of the Royal College of Surgeons.

Nov. 2.

The Boston Medical and Surgical Journal is published weekly, by JOHN COTTON, at 184 Washington St. corner of Franklin St., to whom all communications must be addressed, *post-paid*.—Price three dollars per annum, if paid in advance, three dollars and a half if not paid within three months, and four dollars if not paid within the year. The postage for this is the same as for common newspapers.